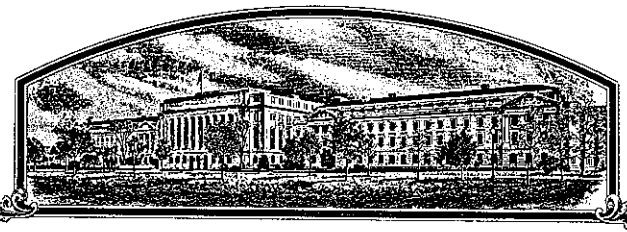
No. 8200181



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure-Seed Testing, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

KENTUCKY BLUEGRASS

'Midnight'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 21st *day of* July *in the year of our Lord one thousand nine hundred and* eighty-three.

Attest:

Kenneth D. Evans

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R Block

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY PV NUMBER 8200181	
P1528T or PS1528T	Midnight		
2. KIND NAME	3. GENUS AND SPECIES NAME	FILING DATE 9/15/82	TIME 2:30 P.M.
Kentucky bluegrass	Poa pratensis	FEE RECEIVED $ 500.00 $ 250.00	DATE 9/15/82 6/14/83
4. FAMILY NAME (BOTANICAL)	5. DATE OF DETERMINATION		
Gramineae	August, 1981		
6. NAME OF APPLICANT(S)	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)		8. TELEPHONE AREA CODE AND NUMBER
Pure-Seed Testing, Inc.	P. O. Box 449, 73 West G St. Hubbard, OR 97032		503-981-7333

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Oregon	6/3/74

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS.
Dr. William A. Meyer, Pure-Seed Testing, Inc.
P. O. Box 449, Hubbard, OR 97032

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[X] YES [ ] NO	[X] FOUNDATION [ ] REGISTERED [X] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

9/14/82
(DATE)

William A. Meyer
(SIGNATURE OF APPLICANT)

1

(DATE)

(SIGNATURE OF APPLICANT)

FORM GR-470 (1-78)

EXHIBIT A.

BREEDING HISTORY OF MIDNIGHT KENTUCKY BLUEGRASS

1. Midnight (Expt. designation P1528T or PS1528T) Kentucky bluegrass originated as a single highly apomictic plant selected from the progeny of NJE-P-154, a selection made from an old lawn located near the Natural History Museum in Washington D.C., crossed with Glade Kentucky bluegrass. The first turf trial of Midnight was seeded in 1972 in New Brunswick, New Jersey. Apomixis studies conducted on Midnight in space plantings have indicated a level of apomixis of higher than 95%.

2. Breeder seed of Midnight Kentucky bluegrass is produced in isolated space plant nurseries from seed of Midnight that is kept in storage.

Breeder seed is used to establish Foundation seed production fields and Foundation seed is used to establish Certified fields.

3. Midnight is a uniform and stable variety. No variants have been noted in the multiplication of Midnight. Breeder's, Foundation, and Certified seed have produced the same uniform good quality turf.

EXHIBIT B.

NOVELTY STATEMENT FOR MIDNIGHT KENTUCKY BLUEGRASS

Midnight Kentucky bluegrass most closely resembles one of its parents, Glade Kentucky bluegrass. However, close comparisions demonstrate the following differences between the two cultivars:

1. Midnight has an improved leaf spot resistance compared to Glade (Tables 2 & 7).

2. Midnight has a much darker blue color (RHSC 133A) compared to Glade (RHSC 136B) (Table 9).

3. Midnight is 4 days earlier maturing than Glade (Table 5).

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN, & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Bluegrass)

OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS (*Poa* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Pure-Seed Testing, Inc.	1528T	Midnight

ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
73 West G Street
P. O. Box 449
Hubbard, OR 97032

OFFICIAL USE ONLY
PVPO NUMBER
82 00181

Select the number which characterizes the variety in the features described below. For measured characteristics use leading zeros as necessary in order to fill all blanks (e.g., [0 9], [0 8 1]). Those characteristics marked with a star ✱ are preferred to be recorded. Any others should be recorded to help establish novelty or uniqueness. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used: _____. Describe location of test area, conditions, and number of plants used: _____

1. SPECIES:

[2] 1 = Poa compressa 2 = P. pratensis 3 = P. trivialis 4 = Others *(Specify)* _____

[ ][ ][ ] Chromosome number

2. ADAPTATION: (0 = Not tested, 1 = Not adapted, 2 = Adapted, 3 = Well adapted)

[3] Northeast [2] Transitional zone [ ] Southeast [3] North Central

[2] Pacific N.W. [2] Intermountain [2] Southwest (CA., AZ.)

[ ] Other *(Specify)* _____

3. MATURITY (At first anthesis): *Give test area* Oregon - June 4.

✱ [6] 1 = Very early 2 = Early (Delta, Mystic) 3 = Medium early (Fylking, Nugget)

4 = Medium late (Newport, Adelphi, Aquila) 5 = Late (Merion, Baron, Enmundi)

6 = Very late (Pacific)

_____ Date of First Anthesis

[ ][ ] Number of days earlier than ✱ [ ]
Maturity same as ✱ [ ]
[1][0] Number of days later than ✱ [4]

1 = Nugget 2 = Fylking 3 = Delta
4 = Merion 5 = Newport 6 = Baron
7 = Mystic 8 = Sabre 9 = Reubens

4. PLANT HEIGHT (At maturity-Average of longest shoot of 10 plants from soil surface to top of panicle): *Test area* _____

✱ [1] 1 = Short (Nugget) 2 = Medium short (Baron, Fylking, Mystic)

3 = Medium tall (Merion, Adelphi) 4 = Tall (Delta) 5 - Very tall

✱ [4][8][.5] cm Height

[ ][ ] cm Shorter than ✱ [ ]
Height same as ✱ [ ]
[ ][ ] cm Taller than ✱ [ ]

1 = Nugget 2 = Fylking 3 = Delta 4 = Merion
5 = Newport 6 = Baron 7 = Mystic 8 = Sabre
9 = Reubens

5. GROWTH HABIT:

✱ [1] Habit: 1 = Prostrate (Nugget) 2 = Semi-prostrate (Merion) 3 = Erect (Delta)

[ ][ ][ ] cm Amount of spread by rhizomes in 1 year (give test area _____)

4

6. LEAF BLADE:

★ [5] Green Color: 1 = Light green (Mystic) 2 = Medium green (Fylking, Bonnieblue)
3 = Moderately dk. green (Merion, Adelphi) 4 = Very dk. green (Nugget, Glade, Enmundi)

★ [5] Bluegreen color: 1 = Not bluegreen (Mystic, Touchdown, Parade) 2 = Moderately bluegreen (Merion, A-34)
RHSC 133A - Table 9
3 = Bluegreen (Nugget, Enmundi, Adelphi) 4 = Strongly bluegreen (Majestic)

[3] Winter color: 1 = Light green 2 = Dark green 3 = Light purple
4 = Dark purple 5 = Not purple 6 = Not green or purple

★ [1] Hairs upper side: 1 = Absent (Nugget) 2 = Sparse (Merion) 3 = Dense (Park)

[2] Hairs lower side: 1 = Absent (Fylking, Merion) 2 = Sparse 3 = Dense (Nugget)

[2] Luster upper side: 1 = Shiny (Eclipse, Enmundi) 2 = Dull (Aquila, Parade)

[1] Luster lower side: 1 = Shiny (Mystic, Enmundi) 2 = Dull (Barbie, Eclipse)

★ [1] Margin hairs (Fringe on Margin or Base): 1 = Absent (Delta) 2 = Present (Fylking, Merion)

★ [1] Width: 1 = Very fine (Mystic) 2 = Fine (Nugget) 3 = Medium (Merion, Fylking)
4 = Broad (Adelphi, Baron) 5 = Very broad (Monopoly)

[ ][4] mm Width (flag leaf)

[ ][ ] mm Narrower than
Width same as
[ ][ ] mm Wider than
★ ★ ★ [ ] } 1 = Nugget 2 = Fylking 3 = Delta; 4 = Merion 5 = Newport 6 = Baron; 7 = Mystic 8 = Sabre 9 = Reubens

[ ][ ][ ] mm Length (flag leaf)

[ ][ ] mm Shorter than
Length same as
[ ][ ] mm Longer than
★ ★ ★ [ ] } 1 = Nugget 2 = Fylking 3 = Delta; 4 = Merion 5 = Newport 6 = Baron; 7 = Mystic 8 = Sabre 9 = Reubens

[ ] Position of flag leaf (angle to stem): 1 = Appressed 2 = Open angle, yet stiff 3 = Nodding

7. LEAF SHEATH:

[ ][ ] mm sheath length

★ [1] Seedling Color (base of sheath): 1 = Green (Nugget, Merion) 2 = Red (Delta)

★ [1] Hairs on Margin: 1 = Absent (Fylking) 2 = Present (Nugget)

★ [1] Margin Roughness (to touch): 1 = Smooth (Delta) 2 = Rough (Sabre)

[1] Hairs on Surface: 1 = Absent ( ) 2 = Present (Nugget)

[1] Surface Roughness (to touch): 1 = Smooth (Fylking) 2 - Rough (Ram I)

[2] Hairs on both sides just beneath leaf blade (under collar): 1 = Absent (Merion) 2 = Present (Nugget)

★ [1] Hairs on Ligule: 1 = Absent (Fylking) 2 = Short (Baron) 3 = Long (Nugget)

[2] Glaucosity: 1 = Absent (Mystic, Enmundi) 2 = Present (Birka)

[2] Keel: 1 = Absent (Ram I) 2 = Present (Adelphi)

82-00181

8. PANICLE (Mature Plant):

[9][2][0] mm Length (Lowest branch whorl to top, for 10 plants) Test area: Oregon

[ ] ★ mm Shorter than
[ ] ★ Panicle same as
[ ] ★ mm Longer than

1 = Nugget 2 = Fylking 3 = Delta
4 = Merion 5 = Newport 6 = Baron
7 = Mystic 8 = Sabre 9 = Reubens

★ [ ] Color (at 50% flowering): 1 = Not red (Fylking) 2 = Red (Nugget)

[ ] Shape of Rachis (opposite lower side branches): 1 = No bend (Nugget 2 = Bend (Merion)

★ [ ] Collar: 1 = Opened (Nugget) 2 = Closed (Merion)

★ [2] Branches Attitude (Lowest whorl): 1 = Drooping (America, Prato) 2 = Horizontal (Merion) 3 = Ascending (Tundra)

[ ][ ] Number of main branches in lowest whorl

★ [2] Panicle Habit: 1 = Nodding (Newport) 2 = Upright (Nugget)

★ [ ] Panicle Type: 1 = Open 2 = Intermediate 3 = Compact

[ ] Anther color (anthesis): 1 = Purple 2 = Yellow 3 = Brown

9. LEMMA

★ [ ] Keel
★ [ ] Marginal Nerves

1 = Glabrous 2 = Slightly pubescent 3 = Pubescent

[ ] Intermediate Nerves: 1 = Distinct 2 = Obscure

[2] Basal Webbing: 1 = Absent 2 = Scant (Baron) 3 = Copious (Merion)

10. SEED: (Floret-not dehulled)

★ [1] Apomixis Percentage: 1 = more than 95 2 = 85 to 95 3 = less than 85

[ ] Phenol Reaction: 1 = none-lemma removed (Merion) 2 = Beige (Cougar) 3 = Brown (Windsor)
4 = Black (Mystic-2 hrs) 5 = Black (-24 hours)

[ ][8][0] mm. Width (average of 10) [2][8][0] mm Length

[3][3][1][0] Milligrams per 10,000 seed

[ ][ ][ ] Milligrams less than
Weight same as
[ ][ ][ ] Milligrams more than

★ [ ]
★ [ ]
★ [ ]

1 = Nugget 2 = Fylking 3 = Delta
4 = Merion 5 = Newport 6 = Baron
7 = Reubens 8 = Sabre

★ [2] Weight Class (g per 10,000 seed): 1 = Light (< 3g Sydsport, Merion)
2 = Medium (3g – 4g Adelphi, Parade)
3 = Heavy (> 4g Fylking, Nugget)

11. ENVIRONMENTAL RESISTANCE: (0 = Not tested; 1 = Very susceptible; 2 = Moderately susceptible; 3 = Moderately resistant; 4 = Highly resistant)

[1] Cool Temperature (Winter color)	[3] Cold (injury)	[4] Heat	[3] Drought
[2] Shade	[3] Low Fertility	[3] Acid Soil (< pH 5.5)	[ ] Alkalinity (pH > 7.5)
[3] Salinity	[3] Soil Compaction	[3] Poor Drainage	[ ] Air Pollution
[ ] Other *(Specify)* _____			

12. DISEASE RESISTANCE: (0 = Not tested, 1 = Very susceptible, 2 = Moderately susceptible, 3 = Moderately resistant, 4 = Highly Resistant)

★ [4] Melting-Out Drechslera poae (Helminthosporium vagans)	[0] Sclerotina Patch S. borealis
★ [4] Helminthosporium Leaf Spot Bipolaris sorokiniana	[2] Stem Rust Puccinia graminis
[4] Brown Patch Rhizoctonia solani	[2] Stripe Rust P. striiformis
[2] Powdery Mildew Erysiphe graminis	★ [3] Leaf Rust P. poae-nemoralis
★ [4] Stripe Smut Ustilago striiformis	[2] Orange Stripe Rust P. poarum

12. DISEASE RESISTANCE (Continued)

3	Flag Smut Urocystis agropyri	3	Pythium Blight Pythium spp.
3	Pink Snow Mold Fusarium nivale	3	Red Thread Corticium fuciforme
3	Ergot Claviceps purpurea		Other _____
★ 3	Fusarium Blight Fusarium roseum, F. tricinctum		Other _____
0	Typhula Blight Typhula spp.		
3	Dollar Spot Sclerotinia homoeocarpa		

13. INSECTS, NEMATODES, RESISTANCE: (0 = Not tested; 1 = Very susceptible; 2 = Moderately susceptible; 3 = Moderately resistant; 4 = Highly resistant)

0	Chinch Bug Blissus spp. (give species: _____)
0	Sod Webworm Crambus spp. (give species: _____)
2	Bluegrass Billbug Sphenophorus parvulus _____)
0	White Grub (Japanese Beetle, Chafers. (give species: _____)
	Greenbug Aphid Schizaphis graminum
	Other _____
	Other _____

14. *Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.*

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading	Glade	1	Leaf width	Glade	2
Height	Glade	2	Leaf color spring	Glade	3
Seed size			Leaf color summer	Glade	3
Seed weight			Leaf color winter	Glade	2
Cold injury	Glade	2	Drought	Glade	3
Heat	Glade	3	Disease ★★	Glade	3
Shade	Glade	1			

★★ *Specify each disease evaluated.*

15. ADDITIONAL DESCRIPTION:

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.

Table 1. Performance of Kentucky bluegrass cultivars and selections in turf trials seeded August 1975 at North Brunswick, New Jersey (Test 1).

	Cultivar or selection	Turf performance score 9 = best 1975 1976 1977 Avg.	1978 Avg.	1979 Avg.	5-year Avg.	Dollar spot No.*	Stripe smut No.**
→ 1.	PS P1528T	7.4	7.5	7.0	7.3	30	2
2.	Princeton 104	7.3	7.2	7.3	7.3	45	0
3.	Eclipse	7.5	6.8	6.6	7.0	0	0
4.	Adelphi	6.7	6.8	6.9	6.8	1	0
5.	Bonnieblue	6.7	7.0	6.6	6.8	0	1
6.	Touchdown	6.9	7.4	6.1	6.8	33	0
7.	Vanessa	6.5	7.0	6.6	6.7	620	0
8.	Oblisk	6.4	6.8	6.7	6.6	15	4
9.	Glade	6.5	6.7	6.5	6.6	235	0
10.	Trenton	6.6	6.2	6.8	6.5	10	0
11.	Bensun A-34	6.3	6.3	6.6	6.4	5	0
12.	Majestic	6.5	6.3	6.0	6.3	0	1
13.	Bristol	6.5	6.4	6.0	6.3	4	1
14.	Mosa	6.2	6.3	6.1	6.2	20	1
15.	Brunswick	6.3	6.1	6.1	6.2	45	0
16.	P-59	6.4	6.2	6.1	6.2	15	0
17.	Haga	6.5	5.7	6.2	6.1	0	2
18.	Merion	6.1	6.4	5.9	6.1	160	8
19.	N1214A	6.3	6.8	5.2	6.1	60	1
20.	N1213	6.3	6.3	5.8	6.1	24	0
21.	Banff	6.5	5.9	5.8	6.1	0	0
22.	N1214	6.3	6.2	5.5	6.0	14	0
23.	Kimono	5.8	5.9	5.6	5.8	223	6
24.	Ram I	5.6	5.8	6.0	5.8	220	0
25.	P-154	5.6	5.5	6.1	5.7	2	0
26.	Plush	6.3	5.0	5.8	5.7	220	0
27.	Fylking	5.6	5.5	5.1	5.4	43	9
28.	Baron	5.5	5.2	5.2	5.3	333	5
29.	Geronimo	5.2	4.9	5.4	5.2	235	0
30.	Cheri	5.3	5.0	5.2	5.2	158	1
31.	Vantage	4.8	4.9	6.0	5.2	1	0
32.	Nugget	5.8	5.4	4.5	5.2	500	0
33.	P-143	5.3	4.0	4.8	4.7	8	0
34.	Wabash	5.7	4.2	3.6	4.5	15	0
35.	Modena	4.7	4.5	4.4	4.5	190	26

* Dollar spot incited by Sclerotinia homoeocarpa in number of infection spots per fifteen square feet.

** Stripe smut incited by Ustilago striiformis in number of infected tillers per square foot.

Table 2. Performance of Kentucky bluegrass cultivars and selections in turf trials seeded September 1978 at Adelphia, N. J.

Cultivar or selection	Turf performance score 9 = best											Percent leaf spot	Number of dollar spots	Purple winter color 9 = most
	1979 avg.	Apr. 15 1980	Apr. 24 1980	May 2 1980	May 22 1980	June 3 1980	July 1 1980	Aug. 1 1980	Aug. 14 1980	Dec. 9 1980	1980 avg.	1980 avg.	Aug. 15 1980	1980 avg.
1. Eclipse	6.8	8.0	7.3	7.7	8.3	8.3	8.0	7.3	7.7	6.7	7.7	2.5	2.0	2.0
2. PS1528T	7.9	6.7	6.7	7.3	8.0	8.3	8.7	8.0	8.3	6.3	7.6	3.1	7.3	5.0
3. PS535	7.2	7.0	6.7	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	4.1	11.0	1.2
4. Warren's I-13	6.8	7.7	8.0	8.0	7.3	7.0	6.7	6.3	6.3	7.0	7.1	1.8	10.7	3.9
5. America	7.3	7.0	6.7	6.3	7.0	6.3	6.7	7.0	8.0	6.7	6.9	6.5	2.7	2.3
6. P-59	6.8	7.3	7.0	7.0	7.7	7.3	7.0	6.0	6.0	6.0	6.8	3.4	29.3	1.0
7. Kimono	6.3	7.0	7.3	7.7	7.3	7.0	7.0	6.0	5.7	5.7	6.8	4.1	25.7	4.7
8. Majestic	7.0	6.7	7.0	7.0	7.3	6.7	7.7	7.0	6.3	5.3	6.8	3.9	15.0	2.0
9. Merion	6.5	6.7	7.7	8.0	7.3	7.3	7.3	6.7	5.7	5.0	5.7	2.1	54.0	5.2
10. Bonnieblue	7.1	6.3	6.7	7.0	7.0	6.7	7.3	7.0	6.0	6.3	6.7	6.1	20.7	3.0
11. Somerset	6.0	6.7	6.7	7.3	7.0	6.3	6.3	6.0	6.7	7.0	6.7	3.2	5.7	1.3
12. Warren's A20-6A	6.6	8.0	7.7	8.0	7.3	6.7	6.3	5.3	5.7	5.7	6.7	2.6	16.7	4.5
13. Enaldo	6.5	8.0	7.0	8.0	7.3	6.7	7.3	5.0	4.7	5.7	6.6	3.7	48.3	4.0
14. H74-243	6.4	8.0	8.0	8.0	6.0	6.0	6.0	5.0	6.0	6.0	6.6	2.0	4.0	1.0
15. Admiral	6.6	7.0	5.7	6.0	6.7	6.7	6.7	6.0	7.0	6.0	6.4	4.4	11.7	1.7
16. Benverde	6.0	7.7	7.0	7.0	6.3	5.7	6.3	5.3	5.3	6.3	6.3	4.8	8.7	3.8
17. Geronimo	5.6	6.3	5.3	5.7	5.7	5.3	6.3	6.0	5.3	5.7	5.8	7.9	25.7	6.7
18. Glade	5.8	4.3	4.0	4.0	5.7	6.0	6.7	6.7	7.3	7.0	5.8	29.5	33.3	5.9
19. Plush	6.2	5.0	4.7	3.7	5.3	4.0	6.0	6.7	6.7	7.3	5.5	29.3	7.3	3.8
20. P-154	6.0	5.0	4.3	4.0	5.0	4.0	5.7	6.3	6.3	6.0	5.2	22.1	5.3	2.9
21. Huntsville 14	5.2	6.3	4.7	4.3	4.3	4.0	5.3	6.0	5.7	6.3	5.2	23.7	3.3	4.0
22. Welcome	5.7	4.7	4.3	4.0	4.7	4.7	4.3	4.7	5.0	6.0	4.7	40.1	8.3	6.5
23. Dormie	4.3	5.3	5.3	5.0	5.3	4.7	4.0	4.7	3.7	2.7	4.5	20.5	3.3	6.5
24. PS#1	4.6	3.3	2.3	2.3	3.3	3.0	4.7	6.0	6.0	6.0	4.1	58.7	4.7	4.4
25. Wabash	5.4	3.3	2.7	2.0	2.3	2.0	3.7	5.7	7.0	7.0	3.9	81.0	4.0	6.4
$LSD_{.05}$	0.5	1.1	1.1	1.1	1.0	1.1	1.1	1.5	1.3	1.3	0.7	12.0	32.2	1.1

TABLE 3.

MORPHOLLOGICAL MEASUREMENTS JUNE, 1982 ON
KENTUCKY BLUEGRASS SPACE PLANTS PLANTED SEPT. 1981
NEAR HUBBARD, OREGON

CULTIVAR	PLANT HEIGHT CM	STANDARD ERROR OF MEAN	FLAG LEAF LENGTH CM	STANDARD ERROR OF MEAN	FLAG LEAF WIDTH MM	STANDARD ERROR OF MEAN
Midnight	48.5	0.59	5.3	0.21	4.0	0.17
Glade	48.0	0.47	5.3	0.21	4.3	0.18

TABLE 5.

HEADING DATES OF KENTUCKY BLUEGRASSES
IN SEED YIELD TRIALS AND SPACE PLANTINGS
NEAR HUBBARD, OREGON IN 1982.

CULTIVAR	SEEDED JUNE, 1981 YIELD TRIAL	SPACE PLANTINGS SEPT., 1981
Midnight	5/30	5/31
Glade	6/3	6/4
Merion	5/20	5/21

TABLE 7.

LEAF SPOT DISEASE RATINGS IN TURF TRIALS SEEDED NEAR HUBBARD, OREGON IN SEPT., 1977 AND MAINTAINED AT MODERATE FERTLITY.

CULTIVAR	PERCENT LEAF SPOT 4/30/78	PERCENT LEAF SPOT 5/13/79
Midnight	6.0	9.7
Glade	13.0	18.7
Merion	10.7	17.0
LSD (0.05)	1.4	4.2

TABLE 9.

COLOR RATINGS OF KENTUCKY BLUEGRASSES IN TURF TRIALS
SEEDED NEAR HUBBARD, OREGON IN SEPT., 1977, SEPT., 1980 & SEPT., 1981
USING THE ROYAL HORTICULTURAL SOCIETY CHARTS

CULTIVAR	1977 TRIAL AUG. 1979	1980 TRIAL AUG. 1982	1981 TRIAL AUG. 1982
Midnight	133A	133A	133A
Glade	136B	136B	136B
Adelphi	136A	136A	136A

EXHIBIT D.

ADDITIONAL DESCRIPTION OF MIDNIGHT KENTUCKY BLUEGRASS

Midnight Kentucky bluegrass is a persistent, low growing, turf-type cultivars with the ability to produce a compact, dense turf, with a medium fine texture, a slow leaf extension rate and a very dark green color (Table 9). It has very good heat and cold tolerance, fair shade adaptation, a slow spring greenup rate and moderate fall low temperature color retention (Table 1, 2 & 6). Midnight possesses good establishment vigor, good mowing qualities, good tolerance of close mowing and a moderate nitrogen fertility requirement. This cultivar shows good resistance to leaf spot (Drechslera poae), stripe smut (Ustilago striiformis) and dollar spot (Sclerotinia homoeocarpa) (Table 1, 2, 6 & 7).